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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,701

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Ja-In Koo

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EXAMINER

MITCHELL, JASON D

ART UNIT

PAPER NUMBER

2193

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,701	<b>Applicant(s)</b> KOO ET AL.	
	<b>Examiner</b> Jason D. Mitchell	<b>Art Unit</b> 2193	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/21/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to an application filed on 6/5/06.

Claims 1-35 are pending in this application.

### ***Drawings***

**Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated** (see e.g. pg. 1, lines 16-19, and pg. 2, lines 23-24). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 3-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

**Claim 3** recites the limitation " the protected program stored in the second storage unit " in lines 3-4. There is insufficient antecedent basis for this limitation in the claim. In view of the specification and scope of the other claims, the examiner believes this term is intended to refer to the "at least one protected program" installed in the "first storage unit" recited in claim 1 (see lines 2-3). For the purposes of this examination, the claims will be treated accordingly.

**Claims 4-8** depend from claim 3 and are rejected accordingly.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0121032 to Cho et al. (Cho) in view of US 2002/0099837 to Oe et al. (Oe).**

**Regarding Claims 1, 9 and 14:** Cho discloses an upgrade apparatus for a home network system which is installed in the home network system (e.g. Fig. 3) having a first storage unit in which at least one program has been installed (par. [0062] "a first memory 323 for storing function data or program to be executed"), and which comprises an upgrade means for deciding whether a second storage unit separated from the first storage unit stores an upgrade file corresponding to the program (par. [0064] "If

Art Unit: 2193

the second processor 325 receives the interrupt signal ... starts the download/setup program stored in the second memory 324”), and

upgrading the program by using the upgrade file according to the decision result (par. [0073] "the household device 320 updates an existing function with the received update function data").

Cho does not disclose that that program being upgraded is a protected program.

Oe teaches a protected program (par. [0009] "method of controlling access to computer resource(s) ... such as a file ... storage device").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to protect Cho's programs (par. [0062] "function data or program to be executed") using Oe's methods (par. [0009] "controlling access to computer resource(s) ... such as a file"). Those of ordinary skill in the art would have been motivated to do so in order to "restrict operations to resources ... by a user who has no access right" (Oe par. [0007]).

**Regarding Claims 2, 10 and 15:** The rejections of claims 1, 9 and 14 are incorporated; further Cho and Oe teach a first storage unit protecting program (Oe par. [0009] "method of controlling access to computer resource(s) ... such as a file ... storage device") is installed (Oe par. [0445] "The protecting program ... can be installed or

Art Unit: 2193

loaded to ... storage") in the first storage unit (par. [0062] "a first memory 323), and it would further be obvious to upgrade the protected program after the first storage unit protecting program is executed. Otherwise, unauthorized changes might be made.

**Regarding Claim 3:** The rejection of claim 1 is incorporated; further Cho discloses:

a connection means for communication with an external server (e.g. Fig. 3, Home Gateway 310); and

a control means for transmitting upgrade information for the protected program stored in the [first] storage unit to the external server through the connection means (par. [0025] "provide household device information to the download manager"; par. [0026] "the gateway searches the server ... for the household device based on the household device information"), and

receiving upgrade data containing a new upgrade file and upgrade information for the protected program from the external server (par. [0073] "transmits the update function data to the household device 320").

**Regarding Claims 4, 11 and 16:** The rejections of claims 3, 9 and 14 are incorporated; further Cho discloses the control means stores the upgrade data in the second storage unit (par. [0062] "a second memory 324 for storing a download/setup program").

**Regarding Claims 5, 12 and 17:** The rejections of claims 4, 11 and 16 are incorporated; further Cho discloses the upgrade means reads the upgrade file from the

Art Unit: 2193

second storage unit, and upgrades the protected program (par. [0073] "the household device 320 updates an existing function with the received update function data").

**Regarding Claims 6, 13 and 18:** The rejections of claims 4, 12 and 17 are incorporated; further Cho discloses the control means deletes the data in the first memory (par. [0075] "overwrites a function program, which has been stored in the first memory 323") but Cho and Oe do not explicitly teach the control means deletes the upgrade information previously stored in the second storage unit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to delete the upgrade information previously stored in the second storage unit (par. [0062] "a second memory 324 for storing a download/setup program"), when that upgrade information is replaced with new upgrade information (par. [0073] "the received update function data"). Those of ordinary skill in the art would have been motivated to do so to conserve space.

**Regarding Claim 7:** The rejections of claims 1-5 are incorporated; further, Cho discloses wherein the second storage unit is logically separated from the first storage unit (Fig. 3, First Memory 323 & Second Memory 324).

**Regarding Claim 8:** The rejections of claims 1-5 are incorporated; further Cho discloses the second storage unit is physically separated from the first storage unit (par.

Art Unit: 2193

[0062] “a first memory 323 ... a second memory 324”; note that Cho describes these as first and second memories and not first and second memory areas, thus at least implying two physically distinct memories).

**Claims 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0121032 to Cho et al. (Cho) in view of US 2002/0099837 to Oe et al. (Oe) in view of US 6,684,397 to Byer et al. (Byer).**

**Regarding Claims 19, 26 and 31:** Cho discloses an upgrade apparatus for a home network system which is installed in the home network system (e.g. Fig. 3) and including a first storage unit in which at least one program has been installed (par. [0062] “a first memory 323 for storing function data or program to be executed”), comprising:

a connection means connected to an external server (Fig. 3, Home Gateway 310), for transmitting upgrade information stored in a second storage unit (Fig. 3, Second Memory 324) separated from the first storage unit (Fig. 3, First Memory 323) to the external server (Fig. 3, Management Server 300), and receiving upgrade data containing a new upgrade file and upgrade information from the external server (par. [0073] “transmits the update function data to the household device 320”);

a control means for storing the new upgrade information, storing the upgrade file in the second storage unit (par. [0062] “a second memory 324 for storing a download/setup program”); and



Art Unit: 2193

an upgrade means for upgrading the program corresponding to the upgrade file (par. [0073] "the household device 320 updates an existing function with the received update function data").

Cho does not disclose that that program being upgraded is a protected program.

Oe teaches a protected program (par. [0009] "method of controlling access to computer resource(s) ... such as a file ... storage device").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to protect Cho's programs (par. [0062] "function data or program to be executed") using Oe's methods (par. [0009] "controlling access to computer resource(s) ... such as a file"). Those of ordinary skill in the art would have been motivated to do so in order to "restrict operations to resources ... by a user who has no access right" (Oe par. [0007]).

Cho and Oe do not teach deciding whether the upgrade file relates to the sub-device or program, and transmitting the upgrade file to the sub-device according to the decision result.

Byer teaches deciding whether the upgrade file relates to a sub-device (col. 10, lines 4-9 "The master 58 may query this first configuration data 66 and establish which slaves

Art Unit: 2193

60 are to have new software 76 remotely installed thereon”) and transmitting the upgrade file to the sub-device according to the decision result (col. 7, lines 57-62 “The master 58 may direct the slave 60 to copy the new software 76 from the first storage device 16a to the second storage device 16b”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to task Cho’s device (Cho par. [0073] “the household device 320”) with updating any appropriate slave devices (Byer col. 10, lines 4-9 “establish which slaves 60 are to have new software 76 remotely installed thereon”). Those of ordinary skill in the art would have been motivated to do so as an efficient means of updating the devices in the system (Cho par. [0008] “household devices 111, which are connected to one another through a related art bus having a predetermined standard”; Byer col. 2, lines 37-44 “Organizational logical trees ... can greatly increase the performance of the network”).

**Regarding Claims 20, 27 and 32:** The rejection of claims 19, 26 and 31 are incorporated; further Cho and Byer teaches the upgrade information relates to the sub-device (Byer col. 10, lines 4-9 “establish which slaves 60 are to have new software 76 remotely installed thereon”) and the protected program (Cho par. [0073] “the household device 320 updates an existing function with the received update function data”).

Art Unit: 2193

**Regarding Claims 21, 28 and 33:** The rejections of claim 19, 26 and 31 are incorporated; further Cho and Oe teach a first storage unit protecting program (Oe par. [0009] "method of controlling access to computer resource(s) ... such as a file ... storage device") is installed (Oe par. [0445] "The protecting program ... can be installed or loaded to ... storage") in the first storage unit (par. [0062] "a first memory 323), and it would further be obvious to upgrade the protected program after the first storage unit protecting program is executed. Otherwise, unauthorized changes might be made.

**Regarding Claims 22, 29 and 34:** The rejections of claims 21, 28 and 33, wherein the upgrade means decides whether the second storage unit stores the upgrade file corresponding to the protected program, and upgrades the protected program by using the upgrade file according to the decision result (par. [0064] "If the second processor 325 receives the interrupt signal ... starts the download/setup program stored in the second memory 324"), after the first storage unit protecting program is executed (see the rejection of claims 21, 28 and 33) and before the connection means is connected to the external server (par. [0064] "when the download/setup program is executed, the household device 320 access the gateway 310").

**Regarding Claims 23, 30 and 35:** The rejections of claims 19, 26 and 31 are incorporated; further Cho discloses the control means deletes the data in the first memory (par. [0075] "overwrites a function program, which has been stored in the first

Art Unit: 2193

memory 323”) but Cho and Oe do not explicitly teach the control means deletes the upgrade information previously stored in the second storage unit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to delete the upgrade information previously stored in the second storage unit (par. [0062] “a second memory 324 for storing a download/setup program”), when that upgrade information is replaced with new upgrade information (par. [0073] “the received update function data”). Those of ordinary skill in the art would have been motivated to do so to conserve space.

**Regarding Claim 24:** The rejections of claims 19-22 are incorporated; further Cho discloses wherein the second storage unit is logically separated from the first storage unit (Fig. 3, First Memory 323 & Second Memory 324).

**Regarding Claim 25:** The rejections of claims 19-22 are incorporated; further Cho discloses the second storage unit is physically separated from the first storage unit (par. [0062] “a first memory 323 ... a second memory 324”; note that Cho describes these as first and second memories and not first and second memory areas, thus at least implying two physically distinct memories).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571)272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bullock Lewis can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason D. Mitchell/  
Primary Examiner, Art Unit 2193